

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently amended) A community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each client terminal to a virtual community, comprising:

access control means for making user authentication of a client terminal as an access request source so as to permit the client terminal to post a message; and

community processing means for managing a virtual community in which a plurality of client terminals can participate, and categorizing and accumulating messages posted to the virtual community, from the client terminals, which are granted access permission by said access control means[[,]] for respective topics,

said community processing means including:

user access limiting means for managing a community type indicating an open level of each virtual community, and a member type indicating a participation attribute of a user to the virtual community, and determining ~~user's access authority of each client terminal~~ accessible virtual community for each of the client terminals using a combination of the community type and member type for each virtual community as an access destination, and providing a window which allows each of the client terminals to access the accessible virtual community.

2. (Currently amended) A system according to claim 1, wherein said user access limiting means determines an access that a client terminal₁ as an access request source₁ can make on the basis of the combination of the community type and member type, and provides a window which allows only the determined access to the client terminal as the access request source.

3. (Currently amended) A system according to claim 1, wherein when the virtual community has a community type "membership" for only a group of authorized members, said user access limiting means permits a user₁ whose member type for the virtual community is "member[[]]", to post and browse messages, and inhibits a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member[[]]", from posting and browsing messages.

4. (Currently amended) A system according to claim 1, wherein said community processing means further comprises means for managing summary messages which summarize messages accumulated in the virtual community for respective topics, and
when the virtual community has a community type "membership" for only a group of authorized members, said user access limiting means permits a user whose member type for the virtual community is "member[[]]", to post and browse all messages including the summary messages, and permits a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member[[]]", to browse only summary messages having an open attribute of the

summary messages in the virtual community.

5. (Currently amended) A system according to claim 1, wherein the community type of each virtual community includes "open" that allows everyone to participate, "membership" for only a group of authorized members, and "closed" that is not open to the public other than authorized members,

the member type indicating the participation attribute of the user includes "member" who has been authorized to participate, "temporary registered member" who is temporarily registered as a member, "intending member" who has applied to participate but has not been authorized to participate yet, and "other[[]]," and

said user access limiting means determines accesses that the client terminal as the access request source can make on the basis of combinations between the "open", "membership[[]]," and "closed" community types, and the "member[[]]," "temporary registered member[[]]," "intending member[[]]," and "other" member types.

6. (Original) A system according to claim 1, further comprising search means for searching messages accumulated in virtual communities in response to a search request from the client terminal, and

wherein said user access limiting means provides a search result list consisting of message search results that browse authority of the client terminal as the search request source can cover of messages which match the search result on the basis of a combination of the community type of the virtual community which is to undergo search, and the member type of the client terminal as the search request source for the virtual

community.

7. (Currently amended) A user access limiting method in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each client terminal to a virtual community, comprising:

the access control step of making user authentication of a client terminal as an access request source so as to permit the client terminal to post a message; and

the community processing step of managing a virtual community in which a plurality of client terminals can participate, and categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission in the access control step[[,]] for respective topics,

the community processing step including:

the user access limiting step of managing a community type indicating an open level of each virtual community, and a member type indicating a participation attribute of a user to the virtual community, and determining ~~user's access authority of each client terminal~~ accessible virtual community for each of the client terminals using a combination of the community type and member type for each virtual community as an access destination and providing a window which allows each of the client terminals to access the accessible virtual community.

8. (Currently amended) A method according to claim 7, wherein the user access limiting step includes the step of determining an access that a client terminal_i as an access request source_i can make on the basis of the combination of the community type and member type, and providing a window which allows only the determined access to the client terminal as the access request source.

9. (Currently amended) A method according to claim 7, wherein the user access limiting step includes the step of permitting a user whose member type for the virtual community is "member[[]]", to post and browse messages, and inhibiting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member[[]]", from posting and browsing messages, when the virtual community has a community type "membership" for only a group of authorized members.

10. (Currently amended) A method according to claim 7, wherein messages accumulated in the virtual community include summary messages which summarize the messages for respective topics, and

the user access limiting step includes the step of permitting a user whose member type for the virtual community is "member[[]]", to post and browse all messages including the summary messages, and permitting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member[[]]", to browse only summary messages having an open attribute of the summary messages in the virtual community, when the virtual community has a

community type "membership" for only a group of authorized members.

11. (Currently amended) A method according to claim 7, wherein the community type of each virtual community includes "open" that allows everyone to participate, "membership" for only a group of authorized members, and "closed" that is not open to the public other than authorized members,

the member type indicating the participation attribute of the user includes "member" who has been authorized to participate, "temporary registered member" who is temporarily registered as a member, "intending member" who has applied to participate but has not been authorized to participate yet, and "other[[]]" and

the user access limiting step includes the step of determining accesses that the client terminal as the access request source can make on the basis of combinations between the "open[[]]", "membership[[]]", and "closed" community types, and the "member[[]]", "temporary registered member[[]]", "intending member[[]]", and "other" member types.

12. (Original) A method according to claim 7, further comprising the search step of searching messages accumulated in virtual communities in response to a search request from the client terminal, and

wherein the user access limiting step includes the step of providing a search result list, consisting of message search results that browse authority of the client terminal as the search request source can cover of messages which match the search result, on the basis of a combination of the community type of the virtual community

which is to undergo search, and the member type of the client terminal as the search request source for the virtual community.

13. (Currently amended) A program used in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each client terminal to a virtual community, said program making a computer execute:

the access control step of making user authentication of a client terminal as an access request source so as to permit the client terminal to post a message; and

the community processing step of managing a virtual community in which a plurality of client terminals can participate. and categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission in the access control step[[.]] for respective topics,

the community processing step including:

the user access limiting step of managing a community type indicating an open level of each virtual community, and a member type indicating a participation attribute of a user to the virtual community, and determining ~~user's access authority of each client-terminal~~ accessible virtual community for each of the client terminals using a combination of the community type and member type for each virtual community as an access destination, and providing a window which allows each of the client terminals to access the accessible virtual community.

14. (Currently amended) A program according to claim 13, wherein the user access limiting step includes the step of determining an access that a client terminal₁ as an access request source₁ can make on the basis of the combination of the community type and member type, and providing a window which allows only the determined access to the client terminal as the access request source.

15. (Currently amended) A program according to claim 13, wherein the user access limiting step includes the step of permitting a user whose member type for the virtual community is "member[[]]," to post and browse messages, and inhibiting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member[[]]," from posting and browsing messages, when the virtual community has a community type "membership" for only a group of authorized members.

16. (Currently amended) A program according to claim 13, wherein messages accumulated in the virtual community include summary messages which summarize the messages for respective topics, and

the user access limiting step includes the step of permitting a user whose member type for the virtual community is "member[[]]," to post and browse all messages including the summary messages, and permitting a user whose member type for the virtual community is unauthorized "intending member" or "anonymous member[[]]," to browse only summary messages having an open attribute of the summary messages in the virtual community, when the virtual community has a

community type "membership" for only a group of authorized members.

17. (Currently amended) A program according to claim 13, wherein the community type of each virtual community includes "open" that allows everyone to participate, "membership" for only a group of authorized members, and "closed" that is not open to the public other than authorized members,

the member type indicating the participation attribute of the user includes "member" who has been authorized to participate, "temporary registered member" who is temporarily registered as a member, "intending member" who has applied to participate but has not been authorized to participate yet, and "other[[]]" and

the user access limiting step includes the step of determining accesses that the client terminal as the access request source can make on the basis of combinations between the "open", "membership", and "closed" community types, and the "member[[]]", "temporary registered member[[]]", "intending member[[]]", and "other" member types.

18. (Original) A program according to claim 13, further comprising the search step of searching messages accumulated in virtual communities in response to a search request from the client terminal, and

wherein the user access limiting step includes the step of providing a search result list, consisting of message search results that browse authority of the client terminal as the search request source can cover of messages which match the search result, on the basis of a combination of the community type of the virtual community

which is-to undergo search, and the member type of the client terminal as the search request source for the virtual community.

19. (New) A community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, comprising:

access control means for making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message; and

community processing means for managing a virtual community in which the client terminals can participate, and categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission by said access control means, for respective topics;

said community processing means including:

summary message managing means for managing summary messages which summarize messages accumulated in the virtual community for respective topics; and

user access limiting means for managing a community type indicating an open level of each virtual community, and a member type indicating a participation attribute of a user to the virtual community, and, when the virtual community has a community type "membership" for only a group of authorized members, permitting a user whose member type for the virtual community is "member" to post and browse all messages including the summary messages, and permitting a user whose member type for the

virtual community is unauthorized "intending member" or "anonymous member" to browse only summary messages having an open attribute of the summary messages in the virtual-community.

20. (New) A community based collaborative knowledge system which can be-connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to-a virtual community, comprising:

access control means for making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message;

community processing means for managing a virtual community in which the client terminals can participate, and categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission by said access control means, for respective topics; and

search means for searching messages accumulated in virtual communities in response to a search request from the client terminal;

said community processing means including:

user access limiting means for managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community, and providing a search result list consisting of message search results that browse authority of the given client terminal as the search request source can cover messages which match the search result on the basis of a combination of the community type of the virtual community which is to undergo search,

and the member type of the client terminal as the search request source for the virtual community.

21. (New) A user access limiting method in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, comprising:

the access control step of making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message; and

the community processing step of managing a virtual community in which the client terminals can participate, and categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission in the access control step, for respective topics;

the community processing step including:

the summary message managing step of managing summary messages which summarize messages accumulated in the virtual community for respective topics; and

the user access limiting step of managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community, and, when the virtual community has a community type "membership" for only a group of authorized members, permitting a user whose member type for the virtual community is "member" to post and browse all messages including the summary messages, and permitting a user whose member type for the

virtual community is unauthorized "intending member" or "anonymous member" to browse only summary messages having an open attribute of the summary messages in the virtual-community.

22. (New): A user access limiting method in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, comprising:

the access control step of making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message;

the community processing step of managing a virtual community in which the client terminals can participate, and categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission in the access control step, for respective topics; and

the search step of searching messages accumulated in virtual communities in response to a search request from the client terminal,

the community processing step including:

the user access limiting step of managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community, and providing a search result list consisting of message search results that browse authority of the client terminal as the search request source can cover messages which match the search result on the basis of a combination of the

community type of the virtual community which is to undergo search, and the member type of the given client terminal as the search request source for the virtual community.

23. (New) A program used in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, said program making a computer execute:

the access control step of making user authentication of a given client terminal, included among the client terminals, as an access request source so as to permit the given client terminal to post a message; and

the community processing step of managing a virtual community in which the client terminals can participate, and categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission in the access control step, for respective topics;

the community processing step including:

the summary message managing step of managing summary messages which summarize messages accumulated in the virtual community for respective topics; and

the user access limiting step of managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community, and , when the virtual community has a community type “membership” for only a group of authorized members, permitting a user whose member type for the virtual community is “member” to post and browse all messages including the summary messages, and permitting a user whose member type for the

virtual community is unauthorized "intending member" or "anonymous member" to browse only summary messages having an open attribute of the summary messages in the virtual community.

24. (New) A program used in a community based collaborative knowledge system which can be connected to a plurality of client terminals via a network, and supports knowledge accumulation by categorizing and accumulating messages posted from each of the client terminals to a virtual community, said program making a computer execute:

the access control step of making user authentication of a given client terminal, included among the-client terminals, as an access request source so as to permit the given client terminal to post a message;

the community processing step of managing a virtual community in which the client terminals can participate, and categorizing and accumulating messages posted, to the virtual community, from the client terminals, which are granted access permission in the access control step, for respective topics; and

the search step of searching messages accumulated in virtual communities in response to a search request from the client terminal;

the community processing step including:

the user access limiting step of managing a community type indicating an open level of each virtual community and a member type indicating a participation attribute of a user to the virtual community, and providing a search result list, consisting of message search results that browse authority of the given client terminal as the search request source can cover messages which match the search result, on the basis of a

combination of the community type of the virtual community which is to undergo search, and the member type of the given client terminal as the search request source for the virtual community.